1-11. (CANCELED)

12. (NEW) A braking method for a vehicle, for use as a safety measure and replacement function in the event that a working brake system of the vehicle fails, in particular a X-by-wire brake system,

in which the vehicle is braked with help of a transmission by means of a defined engagement of frictional shift elements until the vehicle is at rest, a combination of frictional shift elements engaged when the working brake system of the vehicle fails, does not correspond to a shift logic of a gear during normal driving operation of the vehicle and,

starting from a gear engaged at a time when the vehicle's working brake system fails, at least one additional frictional shift element of the transmission is engaged in such manner that drive wheels of the vehicle undergo one of a maximum or a specified braking, but such that the vehicle's drive wheels are not locked while an actual speed of the vehicle is greater than a defined value,

a shifting pressure or a torque is set at a first frictional shift element engaged additionally compared with the normal shift logic, a shifting pressure or torque to be set, being determined as a function of one or more of a brake pedal actuation force, an ACC-radar sensor (distance control unit) and an actual speed of the vehicle.

- 13. (NEW) The braking method for a vehicle according to claim 12, wherein as soon as the failure of the vehicle's working brake system has been recognized, the vehicle is automatically braked by means of the transmission.
- 14. (NEW) The braking method for a vehicle according to claim 12 wherein, if the vehicle's working brake system fails, the vehicle is automatically braked by the transmission when a vehicle brake pedal is actuated.
- 15. (NEW) The braking method for a vehicle according to claim 12, wherein as a function of the vehicle's actual speed, a respective shift element combination is engaged, whereby optimum or maximum vehicle braking is achieved with least possible stress on the transmission or frictional shift elements of the transmission.
- 16. (NEW) The braking method for a vehicle according to claim 12, wherein a shift takes place to a second additional frictional shift element of the transmission compared with the normal shift logic, when a limiting thermal load of a first frictional shift element engaged additionally compared with normal shift logic is reached.

- 17. (NEW) The braking method for a vehicle according to claim 12, wherein a shift to a higher or lower gear with a different combination of frictional shift elements takes place, when a limiting thermal load of a first frictional shift element engaged additionally compared with normal shift logic is reached.
- 18. (NEW) The braking method for a vehicle according to claim 12, wherein the vehicle is braked additionally or alternatively by actuating one of two frictional shift elements in the transmission or a separate frictional shift element acting on a drive output of the transmission.
- 19. (NEW) The braking method for a vehicle according to claim 12, wherein when the vehicle is nearly or actually at rest, one or more of a parking lock of the transmission and a parking brake of the vehicle is automatically engaged.
- 20. (NEW) A braking method for a vehicle having one of a change-under-load transmission, a continuously variable transmission, an automated shift transmission or a dual clutch transmission, the method for use as a safety measure and replacement function in the event that a working brake system of the vehicle fails, in particular a X-by-wire brake system,

in which the vehicle is braked with help of a transmission by means of a defined engagement of frictional shift elements until the vehicle is at rest, a combination of frictional shift elements engaged when the working brake system of the vehicle fails, does not correspond to a shift logic of a gear during normal driving operation of the vehicle and,

starting from a gear engaged at a time when the vehicle's working brake system fails, at least one additional frictional shift element of the transmission is engaged in such manner that drive wheels of the vehicle undergo one of a maximum or a specified braking, but such that the vehicle's drive wheels are not locked while an actual speed of the vehicle is greater than a defined value,

a shifting pressure or a torque is set at a first frictional shift element engaged additionally compared with the normal shift logic, a shifting pressure or torque to be set, being determined as a function of one or more of a brake pedal actuation force, an ACC-radar sensor (distance control unit) and an actual speed of the vehicle.

21. (NEW) A braking method for a vehicle, for use as a safety measure and replacement function in an event that a X-by-wire brake system of the vehicle fails, the vehicle is braked with help of a transmission by means of a defined engagement of

frictional shift elements until the vehicle is at rest, a combination of frictional shift elements engaged when the working brake system of the vehicle fails, does not correspond to a shift logic of a gear during normal driving operation of the vehicle, the method comprising the steps of;

engaging at least one additional frictional shift element of the transmission, starting from a gear engaged at a time when the vehicle's working brake system fails, in such manner that drive wheels of the vehicle undergo one of a maximum or a specified braking, but such that the vehicle's drive wheels are not locked while an actual speed of the vehicle is greater than a defined value,

setting one of a shifting pressure or a torque at a first frictional shift element engaged additionally compared with the normal shift logic, and

determining one of a shifting pressure or torque to be set, as a function of one or more of a brake pedal actuation force, an ACC-radar sensor (distance control unit) and an actual speed of the vehicle.

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